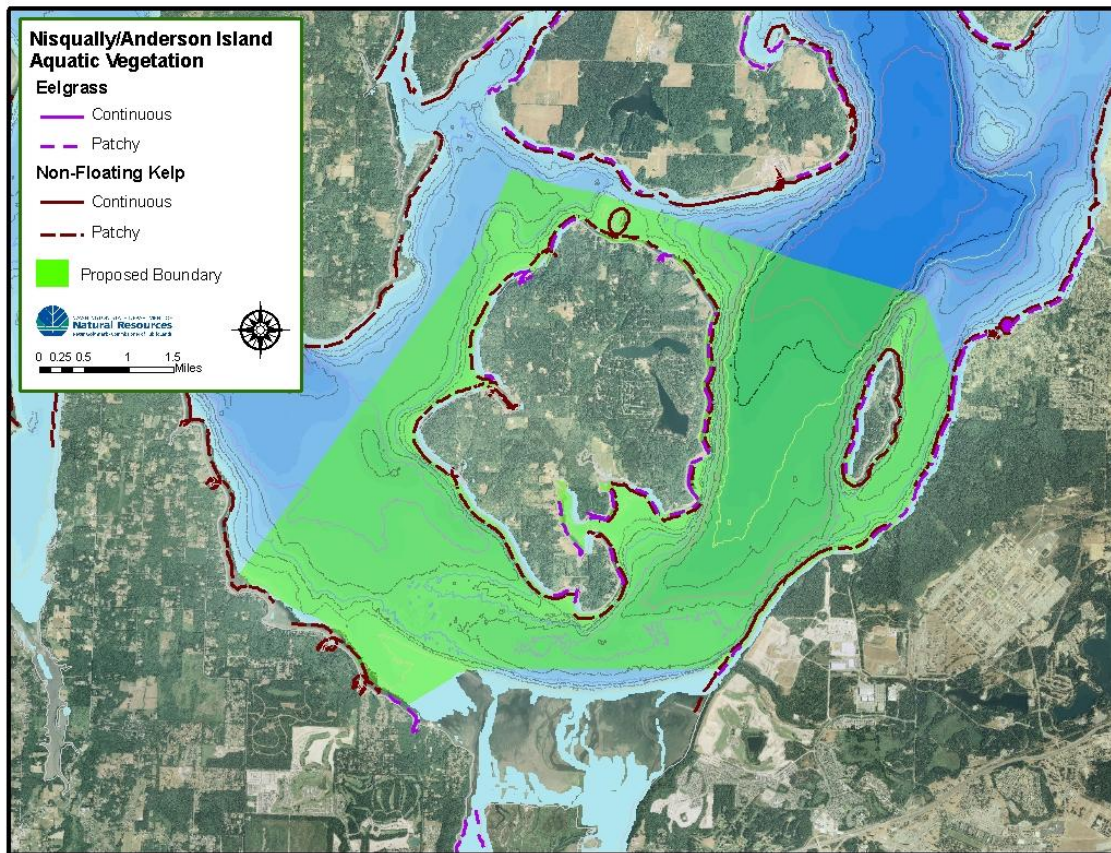




WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

2009 Technical Advisory Committee Site Visit Notes Nisqually Reach



The site visits allowed the Committee to gain first-hand knowledge of habitats and species that are being proposed for aquatic reserve protection. A set of 30 criteria is used for evaluation of the sites and designed to help frame a group discussion about the proposed areas.

June 8, 2009 – West Whidbey Island Site Visit

2009 TAC members:

- Brie VanCleve – Marine Policy Specialist – Washington State Department of Fish and Wildlife
- Dr. Alison Styring – Biological Sciences, The Evergreen State College
- Dr. Joanna Smith – Marine Ecologist, The Nature Conservancy

- John Floberg – Vice President of Stewardship and Conservation, the Cascade Land Conservancy
- Philip Bloch – Biologist, The Washington State Department of Transportation

Assisting the Technical Advisory Committee, the following individuals also participated in the site visits and provided additional sites specific information:

- Kyle Murphy- Aquatic Reserves Program Manager
- Betty Bookheim - Aquatic Reserves Program Scientist
- Dr. Tom Mumford – Nearshore Habitat expert
- Daniel Hull – Executive Director, Nisqually Reach Nature Center
- Doug Myers -
- Local expert

The site visit allowed the TAC to gain first-hand knowledge of habitats and species that are being proposed for aquatic reserve protection.

- Species Identified on the trip over -
 - Six to nine Pacific loons, Pigeon Guillemots, Common Murres, and harbor porpoise.
 - Predominantly undeveloped Island in the South Sound
- Featured Habitats–
 - West side of island - Unperturbed drift cells with relatively pristine beaches, undeveloped bluffs, most areas with intact riparian vegetation, very few overwater structures, several in tact, functional “pocket estuaries”, and unarmored shorelines.

Anderson Island, although part of Pierce County, is considered South Puget Sound region. Within the South Puget Sound, there are areas of extensive shoreline armoring. A study done by Thurston Regional Council, says that approx. 30% - 35% of the shoreline in Thurston County is armored. The following are a few key findings of this study regarding the geomorphic characteristics of the marine shoreline in Thurston County.

1. Shorelines with armoring, particularly bulkheads, differ significantly from unarmored shorelines with regards to the following characteristics:
 - Reduced beach area and thereby reduced forage fish spawning habitat in the upper tidal zone.
 - Reduced local sediment recruitment potential
 - Lowered elevation profile of beaches
 - Reduced area of sand and small gravel, in relation to the beach width.
 - Lack of wood debris from either adjacent riparian areas being cleared or lack of LWD from offshore recruitment and retention.
 - Reduced shade/cover along upper beach from removal of riparian vegetation.
2. The loss of upper beach habitat is more pronounced as the percentage of shoreline armoring increases.
3. Preservation of unarmored shorelines will minimize further impacts to upper beach habitat.
4. Landslides and larger rivers both provide a potentially significant source of sediment.
5. Shoreline armoring has had the likely effect of stopping landslides and may reduce upland inputs of sediments over years or decades,

Prevalent area for documented surf smelt spawning habitat.